UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

ANNUAL COMPLIANCE REPORT

for

PUBLIC WATER SYSTEMS

in the

DISTRICT OF COLUMBIA

for

CALENDAR YEAR 2000

Customer Service Hotline: 1-800-438-2474

INTRODUCTION

The Drinking Water Program: An Overview

The EPA established the Public Water System Supervision (PWSS) Program under the authority of the 1974 Safe Drinking Water Act (SDWA). Under the SDWA and the 1986 and 1996 Amendments, EPA sets national limits on contaminant levels in drinking water to ensure that the water is safe for human consumption. These limits are known as Maximum Contaminant Levels (MCLs). For some regulations, EPA establishes treatment techniques in lieu of an MCL to control unacceptable levels of contaminants in water. The Agency also regulates how often public water systems (PWSs) monitor their water for contaminants and report the monitoring results to the States or EPA. Generally, the larger the population served by a water system, the more frequent the monitoring and reporting (M/R) requirements. In addition, EPA requires PWSs to monitor for unregulated contaminants to provide data for future regulatory development. Finally, EPA requires PWSs to notify the public when they have violated these regulations. The 1996 Amendments to the SDWA require public notification to include a clear and understandable explanation of the nature of the violation, its potential adverse health effects, steps that the PWS is undertaking to correct the violation and the possibility of alternative water supplies during the violation.

The SDWA applies to the 50 States, the District of Columbia, Indian Lands, Puerto Rico, the Virgin Islands, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the Republic of Palau.

The SDWA allows States and Territories to seek EPA approval to administer their own PWSS Programs. The authority to run a PWSS Program is called primacy. To receive primacy, States must meet certain requirements laid out in the SDWA and the regulations, including the adoption of drinking water regulations that are at least as stringent as the Federal regulations and a demonstration that they can enforce the program requirements. Of the 57 States and Territories, all but Wyoming and the District of Columbia have primacy. The EPA Regional Offices administer the PWSS Programs within these two jurisdictions. Thus, the EPA Region III Office, in Philadelphia, PA, administers the PWSS Program in the District of Columbia.

The 1986 SDWA Amendments gave Indian Tribes the right to apply for and receive primacy. EPA currently administers PWSS Programs on all Indian lands except the Navaho Nation, which was granted primacy in late 2000.

Annual State PWS Report

Primacy States submit data to a federal data system called the Safe Drinking Water Information System (SDWIS/FED) on a quarterly basis. Data include PWS inventory statistics, the incidence of Maximum Contaminant Level violations, Major Monitoring violations, and Treatment Technique

violations, and the enforcement actions taken against violators. The EPA Regional Offices report the information for Wyoming, the District of Columbia, and all Indian Lands. Regional offices also report Federal enforcement actions taken. The annual compliance reports that States are required to submit to EPA will provide a total annual representation of the numbers of violations for each of the four categories listed in section 1414(c)(3) of the Safe Drinking Water Act reauthorization. These four categories are: MCLs, treatment techniques, variances and exemptions, and significant monitoring violations. This report is based largely on data retrieved from the federal version of the Safe Drinking Water Information System (SDWIS/FED). Appendix A of this report contains a table which summarizes possible MCL, treatment technique, and monitoring/reporting violations.

DEFINITIONS

Public Water System

A Public Water System (PWS) is defined as a system that provides water via piping or other constructed conveyances for human consumption to at least 15 service connections or serves an average of at least 25 people for at least 60 days each year. There are three types of PWSs. PWSs can be community (such as cities and towns), nontransient noncommunity (such as schools or factories), or transient noncommunity systems (such as rest stops or parks). For this report when the acronym "PWS" is used, it means systems of all types unless specified in greater detail. **There are two community PWSs in the District of Columbia: 1) the Washington Aqueduct Division of the U.S. Army Corps of Engineers; and 2) the District of Columbia Water and Sewer Authority.**

Maximum Contaminant Level

Under the Safe Drinking Water Act, the EPA sets national limits on contaminant levels in drinking water to ensure that the water is safe for human consumption. These limits are known as Maximum Contaminant Levels (MCLs). **During calendar year 2000, no MCL violations occurred at either PWS in the District of Columbia.**

Treatment Techniques

For some regulations, the EPA establishes treatment techniques (TTs) in lieu of an MCL to control unacceptable levels of certain contaminants. For example, treatment techniques have been established for viruses, bacteria, and turbidity. **During calendar year 2000, no treatment technique violations occurred at either PWS in the District of Columbia.**

Variances and Exemptions

Although variances and exemptions to specific requirements under the Safe Drinking Water Act Amendments of 1996 may be granted under certain circumstances, EPA has never issued any variances or exemptions to the public water systems in the District of Columbia. **Thus, during calendar year 2000, no violations of variances and exemptions occurred at either PWS in the District of Columbia.**

Monitoring

A PWS is required to monitor and verify that the levels of contaminants present in the water do not exceed the MCL. If a PWS fails to have its water tested as required, then a monitoring violation occurs. A monitoring violation also includes failure to report test results correctly to the primacy agent.

Monitoring for most chemical contaminants is done at the point(s) where water from the water treatment plant(s) enters the water storage and distribution system. The exceptions are trihalomethanes, lead and copper which are monitored at specific locations in the distribution system. Monitoring for bacteriological contaminants is conducted at specific sites in the distribution system. **During calendar year 2000, no monitoring violations occurred at either PWS in the District of Columbia.**

Significant Monitoring Violations

For this report, significant monitoring violations are defined as any major monitoring violation that has occurred during the specified report interval. A major monitoring violation (except for the Surface Water Treatment Rule) occurs when no samples were taken or no results are reported during a compliance period. A major Surface Water Treatment Rule M/R violation occurs when fewer than 10% of the required samples are taken or no results are reported during a reporting interval. A minor violation occurs when some but not all of the required numbers of samples are taken. **During calendar year 2000, no significant (nor minor) monitoring violations occurred at either PWS in the District of Columbia.**

Consumer Notification

Every Community Water System is required to deliver to its customers a brief annual water quality report. This report is to include some educational, and will provide information on the source water, the levels of any detected contaminants, and compliance with drinking water regulations. **During calendar year 2000, no consumer notification violations occurred at either PWS in the District of Columbia.**

Significant Consumer Notification Violations

For this report, a significant public notification violation occurred if a community water system completely failed to provide its customers the required annual water quality report. **During calendar year 2000, no significant (nor minor) consumer notification violations occurred at either PWS in the District of Columbia.**

DISTRICT OF COLUMBIA INFORMATION

Public Water Systems in the District of Columbia

There are two public water systems in the District of Columbia: 1) the Washington Aqueduct Division of the U.S. Army Corps of Engineers (the Aqueduct); and, 2) the District of Columbia Water and Sewer Authority (DC WASA). The Aqueduct owns and operates two water intakes on the Potomac River in Maryland, two water treatment plants in the District of Columbia, and three finished water storage reservoirs. The treatment plants, Dalecarlia and McMillan, can produce up to 340 million gallons per day (MGD) of potable water for the metropolitan Washington Area.

The Aqueduct is a water wholesaler, and as such, has no distribution system of its own. Its primary customer is DC WASA, which owns and operates eight finished water storage facilities and the water distribution system within the District. (It should be noted that prior to the creation of DC WASA on October 1, 1996, the water distribution system was owned and operated by the former Water and Sewer Utility Administration (WASUA) which was part of the District of Columbia Department of Public Works.)

In addition to DC WASA, the Aqueduct supplies water to three customer PWSs in the Commonwealth of Virginia: Arlington County, the City of Falls Church, and Ronald Reagan Washington National Airport. These customer water systems are regulated by the Virginia Department of Health which has primacy for implementation of the PWSS Program in the Commonwealth. For reference in SDWIS, these five water systems are listed below along with their PWS identification numbers:

DC0000001	Washington Aqueduct
DC0000002	District of Columbia Water and Sewer Authority (as of October 1, 1996; prior name was the District of Columbia Water and Sewer Utility Administration)
VA6013010	Arlington County Department of Public Works
VA6013080	Ronald Reagan Washington National Airport
VA6610100	City of Falls Church Department of Public Utilities

The Aqueduct produces an average of 180 MGD of drinking water for the five water systems listed above which have a total population of about one million. The District, with a total population of approximately 600,000, consumes about 75 per cent of the Aqueduct's production. Although the District has about 60 per cent of the population served by the Aqueduct, it uses more water because it has a large transient population of commuters and tourists.

In addition to supplying water to the District, the Aqueduct provides significant assistance to DC WASA in complying with the monitoring and reporting requirements of the SDWA. The Aqueduct collects and provides analytical services for all of the required entry point samples, which satisfies the requirements for itself as well as its customer PWSs. In addition, the Aqueduct collects and analyzes all of the bacteriological and trihalomethane samples required for DC WASA's distribution system. Responsibility for compliance with lead and copper monitoring is split between the Aqueduct and DC WASA. DC WASA arranges for the collection of lead and copper samples at customers' taps and the Aqueduct laboratory provides the analyses. The Aqueduct collects and analyzes the distribution system samples required for the assessment of optimal corrosion control treatment. On an annual basis, the Aqueduct's laboratory collects and analyzes over 35,000 samples for more than 125 parameters.

The Aqueduct compiles the results of the analyses into monthly monitoring reports for DC WASA and itself . The Aqueduct submits its report directly to EPA Region III. DC WASA uses the data provided by the Aqueduct to prepare the report it submits to EPA Region III. DC WASA periodically prepares and submits its own report of lead and copper sampling at its customers' taps.

Previous SDWA Violations in the District of Columbia

The drinking water regulation known as the Total Coliform Rule (TCR) requires each PWS to collect monthly samples from representative sites in its distribution system for testing for the presence of coliform bacteria. Every coliform positive sample must also be tested to determine if is positive for fecal coliform or *E. coli*. Every coliform positive sample must also be followed by additional repeat samples. The number of samples collected each month is dependent on the size of the population served. In the District of Columbia, a minimum of 210 samples must be collected and analyzed each month. A routine monthly violation of the TCR occurs if more than 5 per cent of the samples collected in a particular month are found to be total coliform positive. An acute violation of the TCR occurs if a total coliform positive sample is found to also be positive for fecal coliform or *E. coli*, and if any of the repeat samples are also coliform positive. (An acute violation can also occur if the initial sample is only coliform positive and any of the repeat samples is fecal coliform or *E. coli* positive.)

In the fall of 1995 and the summer of 1996, WASUA incurred several routine monthly and one acute TCR MCL violation. In addition, a sanitary survey of the District's water storage and distribution system conducted earlier in 1995 found numerous operational and maintenance deficiencies in the system. In response to these events, EPA Region III issued a notice of violation and proposed

administrative order in November 1995 which directed WASUA to develop short and long term plans to correct the deficiencies. EPA Region III then began negotiating a final consent order with WASUA to finalize the plans for remediation and for upgrading the water storage and distribution system. Negotiations were completed and the order was signed in July 1996. WASUA exceeded the TCR monthly MCL (i.e., more than 5% of samples collected monthly were coliform positive) during June, July and August 1996. However, neither WASUA nor its successor DC WASA had additional MCL violations during the last four months of 1996 and no violations at all during calendar years 1997, 1998, 1999 and 2000. Meanwhile, DC WASA has continued to implement its remediation plan and to submit quarterly progress reports to Region III as required by the administrative order. Region III staff have continued to work closely with Aqueduct and DC WASA staff to upgrade the system.

In summary, both the Washington Aqueduct and the District of Columbia Water and Sewer Authority had no SDWA violations during calendar year 2000.

PWSS Program Activities in the District of Columbia

EPA Region III's Water Protection Division works closely with the Washington Aqueduct and DC WASA in the implementation of the PWSS Program in the District. The Region has provided, and is continuing to provide, services to the District such as the following:

Training for water treatment plant and distribution system operators.
Training for distribution system maintenance and repair personnel.
Sanitary surveys of the water treatment, storage and distribution systems.
Sanitary surveys of several large water users in the District.
Drinking water survey of day care centers in the District.
Assistance to the DC Department of Health in conducting a source water assessment of the Potomac River.
Technical assistance to the Aqueduct and DC WASA as needed.

During calendar year 2000, Region III assisted the Aqueduct and DC WASA in developing plans for the issuance of the District's second Consumer Confidence Report (CCR), which was delivered in June 2000. Region III also worked with the Aqueduct, DC WASA, and the Virginia customers in developing a communication plan to notify the public and specific target audiences about the Aqueduct's planned conversion of its secondary disinfectant from free chlorine to chloramine. The construction needed to make the conversion was completed in the spring, and the change over was initiated on November 1, 2000.

Additional information about the PWSS Program in the District, or extra copies of this report may be obtained by contacting:

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Copies of the Annual Compliance Reports for Public Water Systems in the District of Columbia for Calendar Years 1999 and 2000 may also be found on the web at:

www.epa.gov/reg3wapd/drinkingwater/links.htm

Appendix A
Violations Table
(with SDWIS Codes)

State:	District of Columbia
Reporting Interval:	January 1, 2000 to December 31, 2000

SDWIS Codes		MCL (mg/)[1]	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
			Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
	Organic Contaminants							
2981	1,1,1-Trichloroethane	0.2	0	0			0	0
2977	1,1-Dichloroethylene	0.007	0	0			0	0
2985	1,1,2-Trichloroethane	.005	0	0			0	0
2378	1,2,4-Trichlorobenzene	.07	0	0			0	0
2931	1,2-Dibromo-3-chloropropane (DBCP)	0.0002	0	0			0	0
2980	1,2-Dichloroethane	0.005	0	0			0	0
2983	1,2-Dichloropropane	0.005	0	0			0	0
2063	2,3,7,8-TCDD (Dioxin)	$3x10^{-8}$	0	0			0	0
2110	2,4,5-TP	0.05	0	0			0	0
2105	2,4-D	0.07	0	0			0	0
2265	Acrylamide				0	0		

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			Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
2051	Alachlor	0.002	0	0			0	0
2050	Atrazine	0.003	0	0			0	0
2990	Benzene	0.005	0	0			0	0
2306	Benzo[a]pyrene	0.0002	0	0			0	0
2046	Carbofuran	0.04	0	0			0	0
2982	Carbon tetrachloride	0.005	0	0			0	0
2959	Chlordane	0.002	0	0			0	0
2380	cis-1,2-Dichloroethylene	0.07	0	0			0	0
2031	Dalapon	0.2	0	0			0	0
2035	Di(2-ethylhexyl)adipate	0.4	0	0			0	0
2039	Di(2-ethylhexyl)phthalate	0.006	0	0			0	0
2964	Dichloromethane	0.005	0	0			0	0
2041	Dinoseb	0.007	0	0			0	0
2032	Diquat	0.02	0	0			0	0
2033	Endothall	0.1	0	0			0	0
2005	Endrin	0.002	0	0			0	0

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			Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
2257	Epichlorohydrin				0	0		
2992	Ethylbenzene	0.7	0	0			0	0
2946	Ethylene dibromide	0.00005	0	0			0	0
2034	Glyphosate	0.7	0	0			0	0
2065	Heptachlor	0.0004	0	0			0	0
2067	Heptachlor epoxide	0.0002	0	0			0	0
2274	Hexachlorobenzene	0.001	0	0			0	0
2042	Hexachlorocyclopentadiene	0.05	0	0			0	0
2010	Lindane	0.0002	0	0			0	0
2015	Methoxychlor	0.04	0	0			0	0
2989	Monochlorobenzene	0.1	0	0			0	0
2968	o-Dichlorobenzene	0.6	0	0			0	0
2969	para-Dichlorobenzene	0.075	0	0			0	0
2383	Total polychlorinated biphenyls	0.0005	0	0			0	0
2326	Pentachlorophenol	0.001	0	0			0	0

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SDWIS Codes		MCL (mg/)[1]	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
			Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
2987	Tetrachloroethylene	0.005	0	0			0	0
2984	Trichloroethylene	0.005	0	0			0	0
2996	Styrene	0.1	0	0			0	0
2991	Toluene	1	0	0			0	0
2979	trans-1,2-Dichloroethylene	0.1	0	0			0	0
2955	Xylenes (total)	10	0	0			0	0
2020	Toxaphene	0.003	0	0			0	0
2036	Oxamyl (Vydate)	0.2	0	0			0	0
2040	Picloram	0.5	0	0			0	0
2037	Simazine	0.004	0	0			0	0
2976	Vinyl chloride	0.002	0	0			0	0
2950	Total trihalomethanes	0.10	0	0			0	0

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SDWIS Codes		MCL (mg/)[1]	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
			Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
	Inorganic Contaminants							
1074	Antimony	0.006	0	0			0	0
1005	Arsenic	0.05	0	0			0	0
1094	Asbestos	7 million fibers/ 10 m long	0	0			0	0
1010	Barium	2	0	0			0	0
1075	Beryllium	0.004	0	0			0	0
1015	Cadmium	0.005	0	0			0	0
1020	Chromium	0.1	0	0			0	0
1024	Cyanide (as free cyanide)	0.2	0	0			0	0
1025	Fluoride	4.0	0	0			0	0
1035	Mercury	0.002	0	0			0	0
1040	Nitrate	10 (as Nitrogen)	0	0			0	0
1041	Nitrite	1 (as Nitrogen)	0	0			0	0

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SDWIS Codes		MCL (mg/)[1]	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
			Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
1045	Selenium	0.05	0	0			0	0
1085	Thallium	0.002	0	0			0	0
1038	Total nitrate and nitrite	10 (as Nitrogen)	0	0			0	0

State:	District of Columbia
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SDWIS Codes		MCL (mg/)[1]	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
			Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
	Radionuclide MCLs							
4000	**Gross alpha**	**15 pCi/**	**0**	**0**			**0**	**0**
4010	**Radium-226 and radium-228**	**5 pCi/**	**0**	**0**			**0**	**0**
4101	**Gross beta**	**4 mrem/yr**	**0**	**0**			**0**	**0**
	Subtotal		**0**	**0**			**0**	**0**

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SDWIS Codes		MCL (mg/)[1]	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
			Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
	Total Coliform Rule							
21	**Acute MCL violation**	**Presence**	**0**	**0**				
22	**Non-acute MCL violation**	**Presence**	**0**	**0**				
23,25	**Major routine and follow up monitoring**						**0**	**0**
28	**Sanitary survey[2]**						**0**	**0**
	Subtotal		**0**	**0**			**0**	**0**

State:	District of Columbia
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SDWIS Codes		MCL (mg/)[1]	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
			Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
	Surface Water Treatment Rule							
	Filtered systems							
36	**Monitoring, routine/repeat**						**0**	**0**
41	**Treatment techniques**				**0**	**0**		
	Unfiltered systems							
31	**Monitoring, routine/repeat**						**Not applicable**	**Not applicable**
42	**Failure to filter**				**Not applicable**	**Not applicable**		
	Subtotal				**0**	**0**	**0**	**0**

State:	District of Columbia
Reporting Interval:	January 1, 2000 to December 31, 2000

SDWIS Codes		MCL (mg/)[1]	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
			Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
	Lead and Copper Rule							
51	**Initial lead and copper tap M/R**						**0**	**0**
52	**Follow-up or routine lead and copper tap M/R**						**0**	**0**
58,62	**Treatment Installation**				**0**	**0**		
65	**Public education**				**0**	**0**		
	Subtotal				**0**	**0**	**0**	**0**

1. Values are in milligrams per liter (mg/), unless otherwise specified.

2. Number of major monitoring violations for sanitary survey under the Total Coliform Rule.

Definitions for Violations Table

The following definitions apply to the Summary of Violations table.

Filtered Systems: Water systems that have installed filtration treatment [40 CFR 141, Subpart H].

Inorganic Contaminants: Non-carbon-based compounds such as metals, nitrates, and asbestos. These contaminants are naturally-occurring in some water, but can get into water through farming, chemical manufacturing, and other human activities. EPA has established MCLs for 15 inorganic contaminants [40 CFR 141.62].

Lead and Copper Rule: This rule established national limits on lead and copper in drinking water [40 CFR 141.80-91]. Lead and copper corrosion pose various health risks when ingested at any level, and can enter drinking water from household pipes and plumbing fixtures. States report violations of the Lead and Copper Rule in the following six categories:

Initial lead and copper tap M/R: SDWIS Violation Code 51 indicates that a system did not meet initial lead and copper testing requirements, or failed to report the results of those tests to the State.

Follow-up or routine lead and copper tap M/R: SDWIS Violation Code 52 indicates that a system did not meet follow-up or routine lead and copper tap testing requirements, or failed to report the results.

Treatment installation: SDWIS Violation Codes 58 AND 62 indicate a failure to install optimal corrosion control treatment system (58) or source water treatment system (62) which would reduce lead and copper levels in water at the tap. [One number is to be reported for the sum of violations in these two categories].

Public education: SDWIS Violation Code 65 shows that a system did not provide required public education about reducing or avoiding lead intake from water.

Maximum Contaminant Level (MCL): The highest amount of a contaminant that EPA allows in drinking water. MCLs ensure that drinking water does not pose either a short-term or long-term health risk. MCLs are defined in milligrams per liter (parts per million) unless otherwise specified.

Monitoring: EPA specifies which water testing methods the water systems must use, and sets schedules for the frequency of testing. A water system that does not follow EPA's schedule or methodology is in violation [40 CFR 141].

States must report monitoring violations that are significant as determined by the EPA Administrator and in consultation with the States. For purposes of this report, significant monitoring violations are major violations and they occur when no samples are taken or no results are reported during a compliance period. A

major monitoring violation for the surface water treatment rule occurs when at least 90% of the required samples are not taken or results are not reported during the compliance period.

Organic Contaminants: Carbon-based compounds, such as industrial solvents and pesticides. These contaminants generally get into water through runoff from cropland or discharge from factories. EPA has set legal limits on 54 organic contaminants that are to be reported [40 CFR 141.61].

Radionuclides: Radioactive particles which can occur naturally in water or result from human activity. EPA has set legal limits on four types of radionuclides: radium-226, radium-228, gross alpha, and beta particle/photon radioactivity [40 CFR 141]. Violations for these contaminants are to be reported using the following three categories:

Gross alpha: SDWIS Contaminant Code 4000 for alpha radiation above MCL of 15 picocuries/liter. Gross alpha includes radium-226 but excludes radon and uranium.

Combined radium-226 and radium-228: SDWIS Contaminant Code 4010 for combined radiation from these two isotopes above MCL of 5 pCi/L.

Gross beta: SDWIS Contaminant Code 4101 for beta particle and photon radioactivity from man-made radionuclides above 4 millirem/year.

Reporting Interval: The reporting interval for violations to be included in the first PWS Annual Compliance Report, which is to be submitted to EPA by January 1, 1998, is from July 1, 1996 through June 30, 1997. This interval will change for future annual reports. See guidance language for these intervals.

SDWIS Code: Specific numeric codes from the Safe Drinking Water Information System (SDWIS) have been assigned to each violation type included in this report. The violations to be reported include exceeding contaminant MCLs, failure to comply with treatment requirements, and failure to meet monitoring and reporting requirements. Four-digit SDWIS Contaminant Codes have also been included in the chart for specific MCL contaminants.

Surface Water Treatment Rule: The Surface Water Treatment Rule establishes criteria under which water systems supplied by surface water sources, or ground water sources under the direct influence of surface water, must filter and disinfect their water [40 CFR 141, Subpart H]. Violations of the "Surface Water Treatment Rule" are to be reported for the following four categories:

Monitoring, routine/repeat (for filtered systems): SDWIS Violation Code 36 indicates a system's failure to carry out required tests, or to report the results of those tests.

Treatment techniques (for filtered systems): SDWIS Violation Code 41 shows a system's failure to properly treat its water.

Monitoring, routine/repeat (for unfiltered systems): SDWIS Violation Code 31 indicates a system's failure to carry out required water tests, or to report the results of those tests.

Failure to filter (for unfiltered systems): SDWIS Violation Code 42 shows a system's failure to properly treat its water. Data for this violation code will be

supplied to the States by EPA.

Total Coliform Rule (TCR): The Total Coliform Rule establishes regulations for microbiological contaminants in drinking water. These contaminants can cause short-term health problems. If no samples are collected during the one month compliance period, a significant monitoring violation occurs. States are to report four categories of violations:

Acute MCL violation: SDWIS Violation Code 21 indicates that the system found fecal coliform or *E. coli*, potentially harmful bacteria, in its water, thereby violating the rule.

Non-acute MCL violation: SDWIS Violation Code 22 indicates that the system found total coliform in samples of its water at a frequency or at a level that violates the rule. For systems collecting fewer than 40 samples per month, more than one positive sample for total coliform is a violation. For systems collecting 40 or more samples per month, more than 5% of the samples positive for total coliform is a violation.

Major routine and follow-up monitoring: SDWIS Violation Codes 23 AND 25 show that a system did not perform any monitoring. [One number is to be reported for the sum of violations in these two categories.]

Sanitary Survey: SDWIS Violation Code 28 indicates a major monitoring violation if a system fails to collect 5 routine monthly samples if sanitary survey is not performed.

Treatment Techniques: A water disinfection process that EPA requires instead of an MCL for contaminants that laboratories cannot adequately measure. Failure to meet other operational and system requirements under the Surface Water Treatment and the Lead and Copper Rules have also been included in this category of violation for purposes of this report.

Unfiltered Systems: Water systems that do not need to filter their water before disinfecting it because the source is very clean [40 CFR, Subpart H].

Violation: A failure to meet any state or federal drinking water regulation.